RE: ET 04-151 Unlicensed Operation in 3650-3700 MHz

Wireless ISPs like Attron Networks need large amounts of additional spectrum in order to compete with incumbent carriers who have received subsidies from all levels of government in the form of cash, exclusive rights, preferential zoning, and many other non-competitive means. Additional wireless spectrum is the best method of leveling the playing field in urban areas while also making it economically feasible to provide service to geographically diverse populations.

As a member of the WISPA, an organization of over 250 wireless ISPs, I have seen that additional spectrum translates directly into increased competition and diversity of service. The availability of inexpensive 5.8 GHz equipment only a couple of years ago allowed our network to go from low-speed, congestion-riddled 2.4GHz equipment to 50Mb/s connectivity that rivals fiber optics in its latency and ability to carry large amounts of traffic at a low cost. Currently, we believe that we do not currently have the tools necessary to effectively compete with large, diverse carriers with billions of dollars who sell their data services at or below their costs. Additional unlicensed spectrum would be a step in the right direction to provide the means for improved competition.

I believe that the best use of this spectrum would be for outdoor low-density point-to-multipoint and point-to-point deployments. This would allow wireless ISPs to create more reliable core networks that are not subject to interference by the proliferation of 2.4GHz and 5.xGHz equipment used both indoors and outdoors. Since precedent currently exists for the FCC to limit deployment of devices for indoor use only it is reasonable to provide spectrum to be used exclusively outdoors. I believe that the most effective means to accomplish this would be to additionally limit the number of stations allowed to communicate with another station, not allow combined polarities of antennas (like circular or cross-polarization,) and limit the horizontal and vertical beam width of the combined antennas for any radio unit.

Thank you for your attention to this matter.

Sincerely,
Tony Weasler
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